



Florida Cooperative Extension Service

Dooryard Fruit Varieties¹

T.E. Crocker and J.G. Williamson²

There are many kinds of fruit which can be grown successfully in Florida, including temperate fruits in the north and tropical or subtropical fruits in the south. Fruit growing is an interesting and rewarding hobby which provides fresh fruit at the peak of its maturity. Also, fruit plants are attractive additions to many landscape situations.

Selection of species and varieties is critical for fruit production as plants which are not adapted to local conditions will generally fail to produce regardless of how much care and attention they receive. Weather is perhaps the single most important factor which determines where fruit crops can be grown. Winters may be too cold for some, too short for others and still others may suffer from summer's heat and humidity. Consequently, species and varieties of fruits should be chosen on the basis of historical weather patterns. Some considerations of weather are discussed briefly in the following sections.

CHILLING REQUIREMENT

Most fruits which originated in temperate zones go through the winter in a dormant state called the rest period. Generally, this is associated with short days, cold weather and loss of leaves. Exposure to winter temperatures for a certain length of time prepares the plant to start active growth again when temperatures are more favorable for growth.

Temperatures below 45°F (7°C) are known as chilling temperatures. The number of hours below 45°F accumulate through the winter months and constitute total hours of chilling. The Florida Panhandle rarely has fewer than 500 hours of chilling, whereas south Florida rarely has more than 200 hours. Species and varieties differ in the amount of chilling they must have in order to complete rest and resume normal growth. This is considered the chilling requirement of the species or variety.

A plant which does not receive sufficient chilling to satisfy rest is usually delayed in leafing out and blooming. Often, the opening of flower and leaf buds will be scattered over a long period of time. Plants will live only a very few years with insufficient winter chilling, which explains why so few temperate fruits are grown in south Florida. On the other hand, rather cold winters satisfy rest early so that the plants start growing with the first warm spell, which makes them subject to injury by later cold weather, particularly late frosts, which may destroy flowers or young fruit.

COLD HARDINESS

Cold hardiness refers to a plant's ability to withstand cold temperatures without serious injury. Cold damage can occur in all parts of Florida, often being caused by temperatures which are not extremely low but which occur when the plant is not in the best condition to withstand cold. A good example is the

1. This document is Fact Sheet HS-23, a series of the Horticultural Sciences Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Publication date: March 1994.
2. T.E. Crocker, Professor, Horticultural Sciences Department; J.G. Williamson, Assistant Professor, Horticultural Sciences Department, Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville FL 32611.

The Institute of Food and Agricultural Sciences is an equal opportunity/affirmative action employer authorized to provide research, educational information and other services only to individuals and institutions that function without regard to race, color, sex, age, handicap, or national origin. For information on obtaining other extension publications, contact your county Cooperative Extension Service office.

Florida Cooperative Extension Service / Institute of Food and Agricultural Sciences / University of Florida / John T. Woeste, Dean

December 25, 1983 freeze which killed or severely damaged much of the citrus grown in north and central Florida. This freeze was much more damaging than past freezes with comparable minimum temperatures because of the conditions preceeding it. Minimum temperatures were unusually mild for a period of more than one week prior to the freeze. On December 25, temperatures dropped dramatically leaving citrus trees little time to acclimate to the cold weather.

Some species and varieties are quite cold hardy; others are not. During the rest period, temperate fruits can withstand any temperature likely to be experienced in Florida. Other species and varieties would be seriously damaged or killed outright by temperatures which commonly occur in central and north Florida. Bananas are killed to the ground by frost. Avocados are seriously damaged by cold weather, but there are cold hardy avocados which can be grown in protected locations in central Florida. Most tropical fruits cannot tolerate freezing temperatures.

WARM WEATHER ADAPTABILITY

Some species of fruit will often grow satisfactorily in Florida, but will not consistently produce adequate crops of good quality fruit due to the warm, humid weather which prevails during fruiting. Olive, pistachio and date are good examples of this. Plant growth is usually satisfactory, but fruit production is minimal.

VARIETY ADAPTATION

It should be obvious from the foregoing discussion that climatic conditions dictate which fruit species and varieties can be grown in a given area. Many of the species, and all varieties which are common in the northern United States, simply are not adapted to the weather conditions which prevail in Florida. Indeed, none of the species which grow in the northern United States will even grown in south Florida.

For the purposes of this publication, the map in Figure 1 is divided into 3 climatic zones which correspond closely, but not completely, with the standard USDA Plant Hardiness Zone Map. The shaded areas along the coasts of south Florida represent the area where most subtropical fruits can be expected to succeed.

The separation lines between zones are not rigid but should be considered as transition areas. In such an area, varieties from either zone may succeed due to slight variations in climate within a particular area. For example, large bodies of water, large cities and elevation can modify temperatures by several degrees. There are naturally occurring cold pockets and warm locations throughout the state.

When in doubt about whether a particular variety or species will do well in a local area, the county Extension office should be consulted. The variety recommendations in Table 1 are based on the generally prevailing climate of the area and on the knowledge of what has succeeded for other gardeners. However, county Extension faculty will have more specific knowledge of individual county situations.

DECIDUOUS FRUIT VARIETIES

Deciduous fruits enjoy greatest success in north Florida, but there are varieties recommended for all climatic zones.

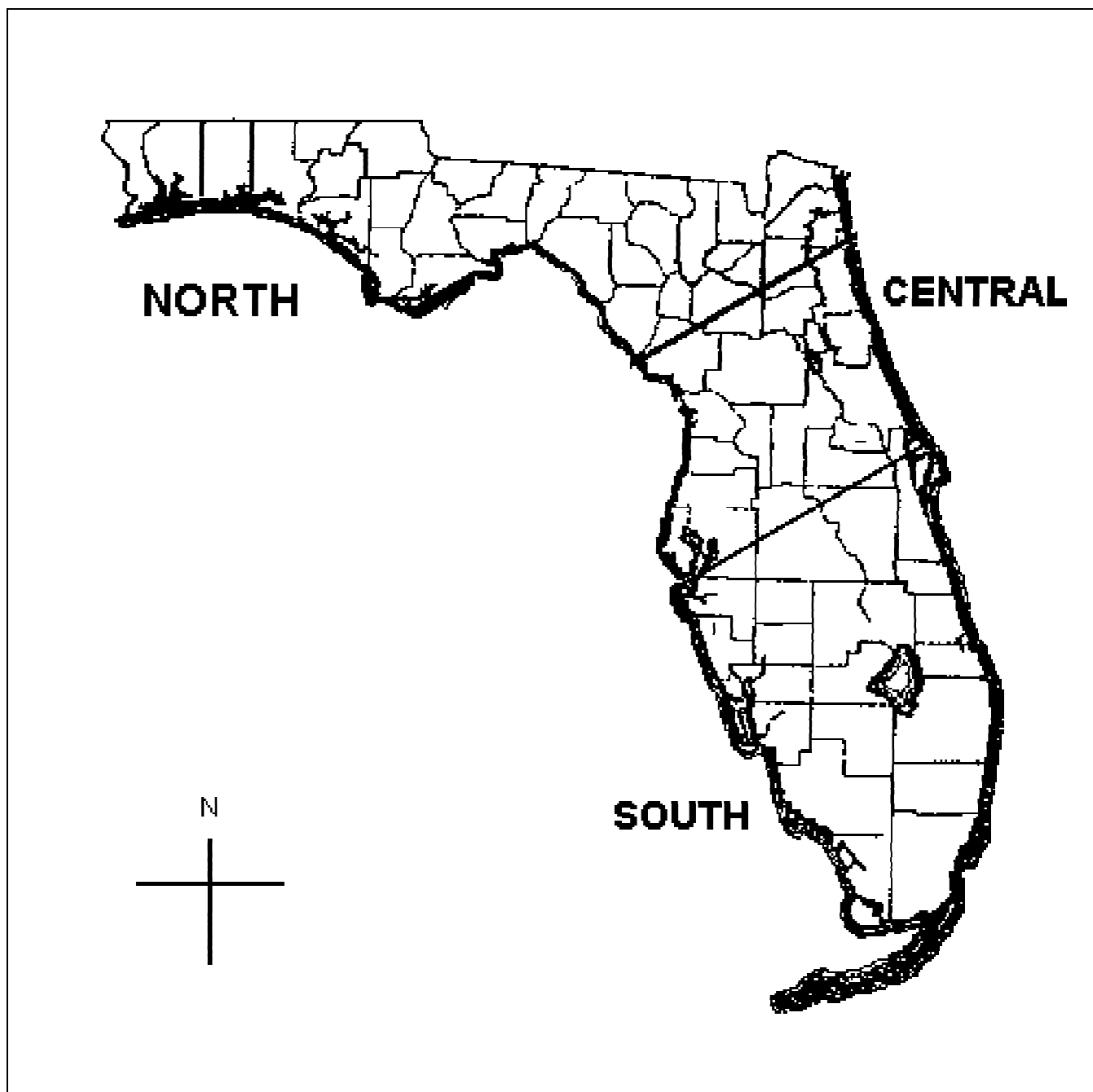


Figure 1. Temperate Zones of Florida

Table 1. Variety Recommendations for Dooryard Planting.

| Variety | Zone ¹ | | | Variety | Zone | | |
|----------------------------------|-------------------|---|---|--------------------------------|------|---|---|
| APPLE | | | | PEAR | | | |
| Ein Shemer | N | C | | Ayres | N | | |
| Anna ² | N | C | | Baldwin | N | | |
| Dorsett Golden ² | N | C | | Kieffer | N | | |
| BLACKBERRY | | | | Florada home | N | C | |
| Brazos | N | C | S | Orient | N | | |
| Floragrand ³ | | C | S | Hood | N | C | |
| Oklawaha ³ | | C | S | Pineapple | N | C | |
| BLUEBERRY | | | | PLUM | | | |
| Beckyblue ⁴ | N | | | Early Bruce ⁸ | N | | |
| Climax ⁴ | N | | | Excelsior | N | | |
| Bonita ⁴ | N | | | Kelsey | N | | |
| Premier ⁴ | N | | | Mariposa ⁸ | N | | |
| Bluegem ⁵ | N | | | Methley ¹¹ | N | | |
| Choice ⁵ | N | | | Ozark Premier | N | | |
| Tifblue ⁵ | N | | | GRAPE | | | |
| Chaucer ⁵ | N | C | | Blue Lake | N | C | |
| Woodward ⁵ | N | C | | Conquistador | N | C | |
| Blue Belle ⁵ | N | C | | Daytona | N | C | |
| Delite ⁵ | N | | | Blanc Dubois | N | C | |
| Flordablue ⁶ | | C | | Lake Emerald | N | C | |
| Sharpeblue ⁶ | | C | | Orlando Seedless | N | C | |
| Avonblue | | C | | Stover | N | C | |
| FIG | | | | Suwannee | N | C | |
| Alma | N | C | S | GRAPE, MUSCADINE -BLACK | | | |
| Brown Turkey ⁷ | N | C | S | Albermarle | N | C | |
| Celeste | N | C | S | Cowart | N | C | S |
| Green Ischia | N | C | S | Jumbo ⁸ | N | C | S |
| Magnolia | N | C | S | Nesbitt | N | C | S |
| San Piero | N | C | S | Southland | N | C | S |
| GRAPE, MUSCADINE - BRONZE | | | | PEACH | | | |
| Carlos | N | C | | Spring Crest | N | | |
| Dixie | N | C | S | Suwannee | N | | |
| Doreen | N | C | | Maygold | N | | |
| Fry ⁸ | N | C | S | June Gold | N | | |
| Golden Isles | N | C | | Springtime | N | | |
| Granny Val | N | C | | Flordaqueen | N | | |
| Higgins ⁸ | N | C | | Rio Grande | N | | |
| Summit ⁸ | N | C | S | Flordaking | N | C | |
| Triumph | N | C | | Flordahome | N | C | |
| Welder | N | C | | Desert Gold | N | C | |

Table 1. Variety Recommendations for Dooryard Planting.

| Variety | Zone ¹ | | Variety | Zone |
|---|-------------------|---|---------------|------|
| NECTARINE⁹ | | | Early Amber | C |
| Armqueen | N | | Flordastar | C |
| Armking | N | | San Pedro | C |
| Sungold | N | | Flordagold | C |
| Sunrich | N | | White Knight | C |
| Sunfre | N | | Flordasun | C |
| Sunlite | N | C | Flordagem | C |
| Sunripe | | C | Maraviha | C |
| Columbia | | C | MeRed | C |
| Sungem | | C | Earligrand | C |
| Sunred | | C | Flordawon | C |
| PECAN | | | Flordaglo | C S |
| Elliot | N | | Flordaprince | C S |
| Stuart | N | | Flordabelle | C S |
| Curtis | N | C | Flordabeauty | S |
| Desirable | N | C | Tropic Sweet | S |
| Moreland | N | C | Flordared | S |
| RASBERRY | | | Florda Grande | S |
| Dorma Red | N | | Red Ceylon | S |
| Mysore | | S | | |
| PERSIMMON | | | | |
| Fuyu (Fuyugaki) | N | C | | |
| Hachiya | N | C | | |
| Hanafuyu | N | C | | |
| Hayakume | N | C | | |
| O' Goshu | N | C | | |
| Saijo | N | C | | |
| Tamopan | N | C | | |
| Tanenashi | N | C | | |
| ¹ N = north Florida, C = central Florida, S = south Florida | | | | |
| ² Requires pollinizer variety | | | | |
| ³ Self-unfruitful, must be planted together | | | | |
| ^{4,5,6} Requires 2 or more varieties (with the same number) for best results | | | | |
| ⁷ Do not plant 'California Brown Turkey' | | | | |
| ⁸ Female variety, requires a non-female variety for pollination | | | | |
| ⁹ Must have 'Okinawa' or 'Nemaguard' rootstock | | | | |
| ¹⁰ Only in warmer parts of North Zone | | | | |
| ¹¹ Western Panhandle only | | | | |

CITRUS VARIETIES

Almost all of the citrus fruits can be grown throughout central and south Florida. Some types such as the satsuma and kumquat may be grown in warm, protected locations of north Florida. Most citrus in the northern part of central Florida should

be planted in protected locations, such as the south side of buildings, due to the possibility of freezing weather. Varieties can be selected with different seasons of maturity to provide fresh fruit over the entire citrus season. The most suitable varieties are listed in Table 2.

Table 2. Suitable Varieties of Citrus for Dooryard Planting.

| Variety | Season | Seeds |
|--|------------------|-------------|
| ORANGES | | |
| Navel ¹ | Very early | Very few |
| 'Hamlin' | Early | Few |
| 'Parson Brown' | Early mid-season | Many |
| 'Pineapple' | Mid-season | Many |
| 'Sunstar' ² | Mid-season | Many |
| 'Gardner' ² | Late mid-season | Many |
| 'Midsweet' ² | Late mid-season | Many |
| 'Valencia' | Late | Few |
| GRAPEFRUIT | | |
| 'Duncan' | Mid-season | Many |
| 'Marsh' | Mid-season | Few |
| 'Redblush' ('Ruby') | Mid-season | Few |
| 'Thompson' | Mid-season | Few |
| 'Flame' | Mid-season | Few |
| 'Ray Ruby' | Mid-season | Few |
| SPECIALTY | | |
| Satsuma ³ | Very early | Very few |
| 'Robinson' ⁴ | Very early | Varies |
| Fallglo ² | Very early | Many |
| 'Sunburst' ⁴ | Mid-season | Varies |
| 'Orlando' ⁴ | Mid-season | Varies |
| 'Dancy' | Mid-season | Few to many |
| 'Minneola' | Mid-season | Varies |
| 'Temple' | Late mid-season | Few to many |
| 'Murcott' | Late mid-season | Few to many |
| Kumquat ³ | Early mid-season | Few |
| ACID⁵ | | |
| Calamondin | Year-round | Few |
| 'Persian' lime ⁶ | Year-round | None |
| 'Key' lime ⁶ | Year-round | Few |
| Lemon ^{6,7} | Year-round | Few |
| Limequat ³ | Year-round | Few |
| ¹ Does not produce large yields of fruit. | | |
| ² May be available in limited quantities in the retail trade. | | |
| ³ Considered cold hardy and can be grown in protected locations of north Florida. | | |
| ⁴ Cross-pollination may increase size, yield and seed number when at least 2 of these varieties are planted together. | | |
| ⁵ Acid citrus bears the largest crop in late summer, but some fruit ripen all year. | | |
| ⁶ Not considered cold hardy and should be restricted to south Florida, except 'Meyer' lemon. | | |
| ⁷ Many varieties can be grown, such as 'Lisbon', 'Bears', 'Eureka', 'Ponderosa', 'Villafranca', 'Meyer' etc. | | |

TROPICAL FRUITS

The tropical fruits are most prominent in the tropical areas of south Florida, but some of these fruits are well-adapted to north Florida. The ability to grow tropical fruits distinguishes Florida from the rest of the continental United States. The following listing in Table 3 is by no means complete, but represents some of the most popular fruits. In many

cases, no varieties are listed, as name varieties are not available -- instead, seedlings or cuttings are grown.

ACKNOWLEDGEMENT

The authors are grateful to W.B. Sherman, Seymour Goldweber and Carl Campbell for suggestions and assistance in the preparation of this fact sheet.

Table 3. Varieties of Tropical Fruits for Dooryard Planting.

| Fruit | Plant Type | Cold Hardiness ¹ | Varieties |
|-------------------|-------------------|-----------------------------|--|
| Akee | Medium tree | 1 | -- |
| Atemoya | Small tree | 1 | African Pride, Page |
| Avocado | Large tree | 1-2 | Many, see footnote ² |
| Banana | Herbaceous "tree" | 1 | Apple, Dwarf Cavendish, Orinoco, Lady Finger |
| Barbados cherry | Shrub | 1 | Florida Sweet |
| Bignay | Small tree | 1 | -- |
| Black sapote | Medium tree | 1 | -- |
| Carambola | Medium tree | 2 | Golden Star, Newcomb, seedlings |
| Carissa | Shrub | 2 | -- |
| Cattley guava | Shrub | 3 | -- |
| Cherimoya | Small tree | 1 | -- |
| Ceylon gooseberry | Large shrub | 2 | -- |
| Coconut | Palm tree | 1 | Dwarf Malay |
| Date | Palm tree | 3 | -- |
| Egg Fruit | Small tree | 1 | -- |
| Feijoa | Shrub | 3 | Choiceana, Coolidge Superba |
| Governor's plum | Shrub | 2 | -- |
| Guava | Small tree | 1 | -- |
| Jaboticaba | Small tree | 2 | -- |
| Jakfruit | Large tree | 1 | -- |
| Jujube | Small tree | 3 | -- |
| Kei-apple | Shrub | 2 | -- |
| Kiwi ³ | Vine | 3 | Abbott, Allison, Bruno, Hayward |
| Longan | Medium tree | 2 | Kohala, seedlings |
| Loquat | Medium tree | 3 | Wolfe, Oliver, Tanaka |
| Lychee | Large tree | 2 | Brewster, Bengal, Mauritius |
| Macadamia | Medium tree | 2 | -- |
| Mamey sapote | Large tree | 1 | -- |
| Mango | Large tree | 1 | Many, see footnote ⁴ |
| Miracle fruit | Small tree | 1 | -- |
| Monstera | Foilage plant | 1 | -- |
| Papaya | Herbaceous "tree" | 1 | Solo, seedlings |
| Passion fruit | Vine | 2 | -- |

Table 3. Varieties of Tropical Fruits for Dooryard Planting.

| Fruit | Plant Type | Cold Hardiness ¹ | Varieties |
|--|-------------------|-----------------------------|--|
| Pineapple | Bromeliad | 1 | Abakka, Natal Queen, Pernambuco, Red Spanish, Smooth Cayenne |
| Plantain | Herbaceous "tree" | 1 | -- |
| Pomegranate | Small tree | 3 | -- |
| Prickly pear | Cactus shrub | 3 | -- |
| Sapodilla | Large tree | 2 | Brown Sugar, Modello, Prolific, Russell |
| Sea grape | Medium tree | 1 | -- |
| Spanish lime | Large tree | 1 | -- |
| Soursop | Small tree | 2 | -- |
| Sweetsop | Small tree | 1 | -- |
| Surinam cherry | Shrub | 2 | -- |
| Tamarind | Medium tree | 1 | -- |
| Velvet apple | Medium tree | 1 | -- |
| Wampi | Small tree | 2 | -- |
| ¹ Cold hardiness: 1 -- limited to shaded area, 2 -- may be grown in protected locations of south and possibly central Florida, 3 -- can be grown in all areas of Florida. | | | |
| ² Varieties with good cold hardiness for central Florida: 'Day', 'Duke', 'Gainesville,' 'Mexicola', 'Teague', 'Topa Topa', 'Winter Mexican', 'Young'. Varieties with moderate cold hardiness for South Florida: 'Booth 7, 'Booth 8', 'Brogdon', 'Choquette', 'Hall', 'Itzamma', 'Lula', 'Monroe', 'Taylor', 'Tonnage', 'Pollock', 'Simmonds'. | | | |
| ³ Kiwi usually will not fruit in Florida. | | | |
| ⁴ Varieties with some anthracnose resistance and fair quality: 'Carrie', 'Early Gold', 'Florigon', 'Glen', 'Saigon'. Varieties with good quality and poor anthracnose resistance: 'Irwin', 'Keitt', 'Kent', 'Palmer', 'Sensation', 'Tommy Atkins'. | | | |